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ABSTRACT

The paper collects data concerned with the problem of underachievement in gifted girls. The first section looks at how society limits gifted girls in the schools and in the work place. The next section examines how gifted girls limit themselves through internal barriers to achievement, attitudes, and lack of self-esteem. The final section offers suggestions to educators and parents to help gifted girls achieve. Suggestions include early identification of gifted girls; programs which contain enrichment, acceleration, and guidance components; the use of adult role models; use of peer support groups; encouraging the seeking of a female mentor; encouraging the taking of 4 years of mathematics in high school; and avoiding sending conflicting messages concerning the desirability of achievement. (DB)

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Gifted Girls: The Disappearing Act

# The Report Card
# #6

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# Gifted Girls: The Disappearing Act

## How Society Limits Gifted Girls

Societal norms suggest that intellectual giftedness is more appropriate for men than for women. School practices and career discrimination often block the paths of aspiring gifted women.

**In schools:**

- Achievements of females are sometimes evaluated less highly than identical achievements of males. Success on a task appropriate to one's sex is expected. Expected outcomes are usually attributed to ability or task difficulty. Success on a task inappropriate to one's sex is unexpected and usually attributed to unpredictable causes such as luck.
- Gifted girl students are often identified later than boys. Those girls not identified until the age of nine or ten frequently develop underachieving attitudes towards school. Once they are in high school, attempts to change these attitudes are rarely successful.
- Current research suggests that traditional standardized assessment measures alone do not adequately identify gifted female students. Achievement tests measure the accomplishment of specific academic objectives believed by the tests' authors to be related to school curriculum. These tests do not identify gifted girls with diverse talents and interests not directly related to the course work.
- Girls who exhibit "inappropriate" sex role behavior (girls who are analytical, unconventional and independent) may actually be labeled "deviant" rather than gifted.
- Girls who are gifted in mathematics are far less likely to be identified than are gifted boys and are less likely to participate in special or accelerated math classes to develop this unique talent.
- Class placement decisions are usually made by a special school committee, based on standardized tests and the subjective assessment of classroom teachers. Because gifted girls may exhibit behaviors that are not likely to fit with standard conceptions of the "good" or "ideal" student, many are not being identified soon enough to allow for early participation in gifted programs.

**In the work place:**

- In a study conducted in 1982, a discrepancy was found between gifted female and male students' ideal choices for jobs and their actual choices. Young women cited lack of talent,

lack of intelligence and a lack of money for training as primary reasons for the discrepancy between ideal and actual career choices. Young men cited only a lack of money for training as their primary reason.

- Stereotyping plays a central role in vocational counseling, career choices and differential salary allotment. When choosing a career path, gifted females lack knowledge about fields and opportunities beyond the scope of typical and well-known fields.
- External barriers that block the paths of aspiring women into nontraditional occupations include hiring biases, differential salary allotment and discouragement by respected older persons and peers.
- Many gifted girls fail to realize the potential of their early years, settling in jobs below their abilities. A study of the lives of 22 women who had been identified as gifted girls showed only three to have had challenging careers.
- Gifted young women, but not gifted young men, expect to interrupt their careers or take parttime work in order to combine career and child-rearing roles. Many gifted girls are likely to gravitate away from professional careers that are perceived as either too demanding or too inflexible for the dual career and family roles of many women.
- In 1984, 60 percent of all working women had no paid parental or maternity leave. During this same year, out of six million United States businesses of all sizes, only 2,000 gave support to employee child care needs.
- A longitudinal study of 1,250 gifted women who graduated between 1911 and 1983 from Hunter College High School in New York (the school requires a minimum 130 IQ for admittance) showed the overwhelming majority working at female-dominated, low-paying jobs. These gifted women succeeded no better in their careers than other female college graduates.
- Women continue to dominate lower paying traditionally female professions. Women are 96.5 percent of all nurses, 85 percent of librarians, 65 percent of social workers and more than 80 percent of all clerical workers. These percentages have changed little since 1900, even though many more women continue to enter the work force.

# How Gifted Girls Limit Themselves

Research on sex role stereotyping and bias affecting gifted students can be traced back to a 1921 study by Terman on *Genetic Studies of Genius*. The wide and longstanding acceptance of Terman's hypothesis that heredity was the superior cause of giftedness and that this theory favored male children resulted in the stereotype that male students were more capable than female students. This attitude still exists today. Current research findings suggest that many gifted girls have low self-esteem, low achievement motivation and a fear of success. These girls also exhibit passive behaviors and negative self-perceptions. Because of these attitudes, there is a great need for assisting students in overcoming internal barriers to achievement.

- Differing perceptions of male and female performances appear to be well established in both girls and boys by the fifth grade. It is accepted that boys do certain tasks well; and girls, others.
- Male scholars are far more likely to acknowledge their intellectual abilities than female scholars.
- Socialized by peer and sex role expectations, many gifted girls show a decline in interest in intellectual achievement by the eighth grade.
- Boys who are creatively talented receive greater peer acceptance than creatively talented girls.

- Many girls who are talented in mathematics do not develop their skills to the fullest. Some fall victim to societal stereotypes about intellectual giftedness and mathematics being more appropriate for men. They avoid mathematics in high school and, upon entering a university, find that their lack of mathematics training drastically reduces their career options.
- Of the students who were identified in talent searches in mathematics and science, the girls exhibit less confidence than the boys.
- Males tend to attribute success to internal causes such as ability while females tend to attribute success to external factors such as luck. Males tend to attribute failure to external causes such as a lack of money while females tend to attribute failure to internal causes such as a lack of ability.
- For women, low self-esteem is a barrier to career choice and achievement.
- A 40-year study of 1,000 gifted children found that the girls were less ambitious about career aspirations even though in school they were superior to gifted boys in almost all school subjects. As adults, these same gifted females were found to be less successful in occupational status, income and intellectual contribution to society than average males.

## Helping Gifted Girls Achieve

Effective use of appropriate strategies listed below requires a more expansive definition of gifted talents. Giftedness has three characteristics: above average general abilities, high level of task commitment and high levels of creativity. According to Public Law 95-561, these characteristics can be expressed by students in one or more of the following areas: intellectual abilities; creative talents; specific academic or leadership ability, or talents in the performing or visual arts. This more comprehensive definition of giftedness can help to identify gifted students and develop programs that include both girls and boys.

In addition, stereotypes of giftedness and gender-appropriate behavior must be replaced by informed understanding of the diversity of intellectual talents and by recognition of the importance of a variety of skills for both women and men. Educators and parents must form a partnership to enable gifted girls to use their full abilities.

**What Educators Can Do:**

- Early and proper identification of those students who are indeed gifted is the first step toward implementation of programs to enrich the learning experiences of those who are gifted and talented.
- A multidimensional approach can include a self-report talent inventory designed to identify the level and scope of activities engaged in by each young girl, standardized test data and peer, parent and/or counselor nominations. This kind of identification system recognizes and supports individuals who have talents nontraditional to their sex.
- Effective gifted programs should contain *enrichment, acceleration* and *guidance* components.
  - — Enrichment activities should include three types of tasks: general exploratory activities, group activities and individual or small group investigations.
  - — Acceleration consists of academic programs for gifted children who are admitted to school early. These programs are especially important for females, who tend to receive insufficient recognition and development of their talents in the high school years.
  - — Career guidance can provide needed encouragement for girls to follow nontraditional pursuits, both academically and professionally.
- Adult role models should be used to provide guidance and leadership for gifted females. Girls who are exposed to female role models tend toward higher goals, aspirations and greater career commitments.
- Counselors should apprise parents of the characteristics of gifted girls and help them to recognize how these characteristics affect behavior.
- Teachers should be trained to work specifically with gifted and talented students. An effective inservice or preservice program should emphasize the development of an understanding of environmental, cultural, gender and sociological differences among students.
- Developing awareness of the usefulness of mathematics in their future career options is the most effective way of increasing the involvement of gifted high school girls in mathematics courses.
- Use of peer support groups helps to ensure the continued success of gifted girls.

**What Parents Can Do:**

- Research on adults with outstanding accomplishments has revealed significant parental influences. As children, their abilities were noted when they were quite young; their talents were nourished and encouraged; and family expectations and example influenced their achievement.
- Family support, parental interest in the child's school progress, parental involvement in school programming, family provision of study aids and non-school learning opportunities (e.g., museums or cultural events) are found to create positive student attitudes towards academic endeavors.
- The parents of gifted girls can:
  - — Encourage their daughters to seek a female mentor. In several studies of adult high achievers, nearly all had a strong role model.
  - — Insist that their daughters take mathematics during all four years of high school. Reinforce the idea that success in mathematics is both necessary and appropriate for girls.
  - — Recognize their daughters' needs for solitude—to read, to imagine, to think—as well as for social interaction.
  - — Avoid sending conflicting messages, such as encouraging their daughters to achieve, but not so much that they become unattractive to boys.

This report has outlined specific steps parents and educators can take to encourage the success of gifted girls. These strategies are necessary, but not sufficient by themselves, to prevent these gifted girls from disappearing as they enter adult life. Prevention requires changes in our attitudes as a society and in government and labor policies.

A large number of barriers have been overcome, but many still remain. A panel set up by the National Academy of Sciences determined that restriction, not choice, plays the essential role in the concentration of women into a few occupations. It further concluded that without more active intervention by the federal government and corporate leaders, gifted and talented women will not use their full abilities; and these human resources will be lost to the nation.

To effectively prevent this loss, policy changes need to occur in the boardrooms of corporations as well as in the committee rooms of Congress. For example, the United States remains the only industrial country which does not have a comprehensive child care policy. How does this absence of policy affect women? In a recent study, college women would not consider a career in science because they believed it would not mix with raising a family, while their male counterparts did not view pursuing science and raising a family as incompatible.

Although not widely available, some programs to address this issue have been initiated. Two good examples are the "cafeteria plan," where employees choose the flexible fringe benefits (e.g., child care) best for them, and alternative work patterns. Alternative work patterns include flexible work hours, job sharing, family leave and parental sick leave. By broadening these policy changes, sex bias and sex segregation can be eliminated in education, in the work place and in family life responsibilities.

Plato said it clearly 2,000 years ago: "Nothing can be more absurd than the practice which prevails in our country of men and women not following the same pursuits with all their strengths and with one mind, for thus the state instead of being whole, is reduced to half." Perhaps Plato had gifted girls in mind when he wrote this statement. Many longitudinal studies of gifted girls show that societal pressures result in a disappearing act, for as gifted girls mature they frequently choose to give up or hide their special abilities. Here is a capsule summary of what happens.

Although the proportion of identified gifted boys and girls is roughly equal in schools, the chances of a gifted girl realizing her full potential are discernably less than if she were a boy. Many very capable girls begin to lose interest in intellectual pursuits by the eighth grade. Some of these same girls continue to avoid mathematics in high school, and by the time they enter college their aspirations for their future are greatly diminished. Unfortunately, girls do not maintain achievements consistent with their potential.

A recent survey of high school valedictorians and honor students found that 23 percent of the men and 21 percent of the women rated themselves as "far above average" in intelligence during their senior year of high school. But by their sophomore year of college, only 4 percent of the women still thought of themselves as exceptionally bright as opposed to 22 percent of the men. Even the successful female students find their self-esteem easily eroded. Although women now make up the majority of the postsecondary population, among all women receiving bachelor's degrees in 1981, only 33 percent majored in the physical sciences, mathematics or engineering. In 1984 women earned one-third of the doctoral degrees, but only 13.6 percent in mathematics and science areas of study.

As the years go by, these bright young women become even more invisible. For example, women:

- make up only 2 percent of the members of the U.S. Senate and approximately 5 percent of the House of Representatives;
- own only 7 percent of all businesses in this country;
- constitute less than 2 percent of all school superintendents and 9 percent of all college and university presidents;
- comprise only 10 percent of all full professors at the college level;
- occupy only 5 percent of the executive positions of power in American corporations;
- hold none of the leading positions in the top five major orchestras in the United States. These positions include concertmaster, principal cello, bass or viola, oboe, clarinet, horn, trumpet, trombone, tuba, bass or percussion; and
- represent only 4 percent of engineers, 13 percent of lawyers, 13.4 percent of doctors and 6.7 percent of architects.

What happens to the potential contributions of these gifted women? Society sets up some barriers, such as the inherent conflicts in the expectations for gifted female students, inequitable school practices, lack of support for achieving females and limited career opportunities. As a result of these factors, gifted girls may experience psychological barriers themselves. These include insufficient motivation, inadequate self-concept and fear of success.

This report card will help to clarify the factors which contribute to these barriers and provide recommendations for educators and parents. The success of these strategies will have long-term implications for society at large and could help to recover some of the wasted potential and bring back 50 percent of "the best and the brightest."

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* Full citations are available upon request. A listing of organizations concerned with gifted and talented education is also available.


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# GIFTED GIRLS

# THE DISAPPEARING ACT

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